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ARIZONA STATE UNIVERSITY ■ COLLEGE OF BUSINESS
CENTER FOR BUSINESS RESEARCH

Winter Residents Add 10 Percent to Valley's Population

An estimated 192,000 seasonal residents were living in the Phoenix metropolitan area (including the Apache Junction area in neighboring Pinal County) at the height of the 1987-88 season in February. This estimate is based on the results of a recently completed study that is part of ongoing ASU College of Business research on seasonal migration and its impacts. Total resident population at the same time was approximately two million.

For the past five years, researchers have surveyed the Valley's winter residents of mobile home and travel trailer/recreational vehicle parks. Starting in 1984 with a census of parks in the Mesa/Apache Junction area, the survey area has expanded, including the entire Phoenix metropolitan area since 1986. Procedures for the 1987-88 census modified the methodology used in previous years. In January, an announcement of the February survey was sent to the 714 parks on the 1986-87 list. Letters having incorrect addresses or addressed to parks no longer in operation were returned. Based upon telephone and on-site follow-ups, incorrect park names and/or addresses were corrected, and the list was pared from 714 to 676 parks.

In the second week of February, census questionnaires were mailed to each park. Non-responding parks were sent a follow-up mailing, and additional phone and on-site follow-ups were also undertaken. In all, the 1987-88 census received usable information from 376 parks containing 81 percent of total spaces.

RESULTS

As shown in Table 1, parks in the Phoenix area, including Apache Junction in the East Valley and Tonopah in the West Valley, had 58,400 mobile home spaces and 40,700 travel trailer/RV spaces – almost 100,000 total spaces. The proportion of occupied spaces in all parks averaged 85 percent, down slightly from the 89 percent of last year. An estimated 53 percent of occupied spaces Valleywide were home to seasonal residents during February. With 84,000 occupied spaces, this proportion implies a winter resident population in the parks of 44,500 households or 89,000 persons at the peak of the 1987-88 season, assuming an average of two persons per household.

In past winter resident studies, several mobile home subdivisions have been included as part of the mobile home/travel trailer/RV census. With the residents owning their own lots and with no centralized park management, it has been difficult to collect survey information for these communities. Including an estimate for these subdivisions, the total of 44,800 households or 89,600 persons is still less than the

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estimated winter mobile home/travel trailer population of 47,000 households at the peak of the 1986-87 season. The lower estimate for the 1987-88 season results from: (1) fewer households living in East Valley mobile home parks being identified as winter residents, even though the total number of occupied spaces in the area increased; and (2) fewer estimated winter resident households in Phoenix, as a number of parks were no longer in operation and more spaces were occupied by permanent residents.

The results of the 1987-88 park census show that the number of winter resident households living in East Valley *travel trailer/RV parks* increased relative to the previous year. The estimated number of winter resident households living in East Valley *mobile home parks* declined, however, even though the total number of occupied mobile home spaces increased. It appears that some households previously identified by the park managers as seasonal residents now are considered permanent residents. Surveys conducted among park residents in several individual parks have shown a tendency for park households, particularly those living in mobile homes who return each season, to stay longer in the Valley over time. A sizable number of households stay six months or longer yet do not define Arizona as their legal place of residence. Table 2 shows the number of months of relatively full occupancy for East Valley parks. The proportion of mobile home parks with 90 percent or more occupancy for seven months or more was 69 percent this past season, up substantially from 57 percent during the 1985-86 season.

Responses by park owners/managers to the question, "Compared to last year, are there more, about the same, or fewer winter residents in your park this year?" are summarized in Table 3. While the estimates based upon survey information imply a slight decline in the number of winter residents, the majority of Phoenix area park owners/managers indicated "the same," with 20 percent in the East Valley saying "more" and only 13 percent responding "fewer."

TABLE 1
WINTER RESIDENTS IN METROPOLITAN PHOENIX MOBILE HOME AND TRAVEL TRAILER/RV PARKS

1987-88 Census by Geographic Area	*East*	*Phoenix*	*West*	*Total*
Number of Mobile Home Spaces	31,300	16,300	10,700	58,400
Occupancy Rate	87%	94%	79%	85%
Number of Travel Trailer/RV Spaces	32,900	2,800	4,900	40,700
Occupancy Rate	88%	93%	56%	84%
Number of Occupied Spaces	56,000	16,700	11,200	84,000
Percent of Spaces Occupied by Winter Residents	67%	20%	31%	53%
Number of Winter Resident Households	37,500	3,400	3,500	44,500

Source: Census conducted by the authors, February 1988.

TABLE 2
DURATION OF 90 PERCENT OR MORE OCCUPANCY
By Type of Park, East Valley

Months	*Mobile Home Parks*	*Travel Trailer/ RV Parks*	*Mixed Parks*	*All Parks*
1	0%	5%	5%	4%
2	0	10	3	4
3	4	45	10	16
4	8	20	3	8
5	8	10	25	16
6	12	10	25	17
7 or more	69	0	30	35
Total	100	100	100	100
Median	11 months	3 months	5 months	5 months

Source: Census conducted by the authors, February 1988.

The census results presented in Table 1 clearly show that the Valley's winter resident population is heavily concentrated in the East Valley. More than one-half of the Valley's mobile home spaces and more than 80 percent of the travel trailer/RV spaces are located in East Valley parks. With winter residents living in 67 percent of the total occupied spaces, 84 percent (37,500 households) of the Valley's seasonal park population resided in the East Valley.

TOTAL WINTER RESIDENT POPULATION

The ASU park census attempts to count the most visible and single largest group of winter residents: the predominantly elderly seasonal residents in mobile home and travel trailer/RV parks. Substantial numbers of snowbirds also come to stay in single-family homes or condos, in seasonal apartment complexes, in hotels and motels, and with friends or relatives in the Phoenix area each winter. Given the cost and effort that would be involved in a comprehensive survey of the area's seasonal population, no census of the non-park winter residents has been undertaken. In a special survey for *Forecast 1986*, Western Savings questioned 500 seasonal residents about a variety of subjects, including housing during their stay in the Phoenix area. The proportions of households living in each type of housing during the 1985-86 season are presented in Table 4. Assuming that these proportions are still representative of the area's winter resident population, the estimate of 45,000 snowbird households living in mobile homes/travel trailers/RVs implies a total Valley winter resident population of 96,000 households or 192,000 persons in February 1988.

Unfortunately, no procedure exists for measuring fluctuations in the number of non-park winter residents coming to the Valley each winter season. The number of non-park

TABLE 3
COMPARISON OF WINTER VISITOR BUSINESS
1987-88 VERSUS 1986-87 SEASONS
By Geographic Area

	East Valley	Phoenix	West Valley	Total
Parks With More Seasonal Residents Than 1986-87	20%	4%	17%	15%
Parks With Similar Numbers of Seasonal Residents	60%	56%	63%	60%
Parks With Fewer Seasonal Residents Than 1986-87	14%	18%	7%	14%
Not Applicable/No answer	6%	22%	13%	11%
Total	100%	100%	100%	100%

Source: Census conducted by the authors, February 1988.

TABLE 4
WINTER RESIDENT HOUSEHOLDS:
NUMBER AND PERCENTAGE OF EACH TYPE
Metropolitan Phoenix (Including the Apache Junction Area), February 1988

	Number	Percent
Mobile Home/Travel Trailer/RV	45,000	47
Apartment	22,000	23
Single Family Home/Condominium	14,000	15
Hotel/Motel	8,000	8
Friends/Relatives	7,000	7
Total	96,000	100

Source: *Forecast 1986*, by Western Savings and Datapol, February 1986; and calculations by the authors.

seasonal residents may have been down during 1987-88. The impacts of the October stock market crash and related financial dislocation, along with the depressed agricultural sector, may have had negative effects upon the financial positions of some of the retired and semi-retired households who normally would have chosen to migrate to Arizona for the winter.

ECONOMIC CONTRIBUTION

The debate continues concerning the relative benefits and costs to the Valley of the Sun from the annual influx of snowbirds. On the positive side, consumer purchases by these out-of-state households produce a major injection of spending into the local economy each winter season.

In 1986-87, snowbirds injected an estimated $188 million into the Valley economy, assuming 47,000 winter resident households living in mobile homes and travel trailers, staying an average of four months, and having average monthly expenditures of $1,000 per household. Maintaining the same assumptions for length-of-stay and monthly expenditures, the estimated 45,000 seasonal mobile home/travel trailer households contributed $180 million in consumer spending during the 1987-88 season.

This figure is a conservative estimate for a number of reasons. The length-of-stay and spending assumptions are likely to be low. The estimate assumes that rent is paid only for the average length of stay, though many households rent their space on an annual basis. The estimate does not include monies spent locally by seasonal residents when purchasing their mobile homes/travel trailers/RVs in the Phoenix area. Medicare payments to local health care providers are also ignored in this estimate.

For the 1986-87 season, winter resident households living in other types of accommodations spent a total of $212 million, based upon the same length-of-stay and spending assumptions employed for the park residents. The same assumptions of an average stay of four months and average monthly expenditures of $1,000 imply spending by non-park winter resident households topped $200 million during the 1987-88 season.

As with the expenditure estimate for the seasonal residents staying in mobile homes and travel trailers, this spending total is likely to be conservative. Although many non-park households stay less than four months, they are likely to have spent much more than the assumed $1,000 per month during their stays. This is particularly true for those seasonal residents living in homes and condominiums in the Scottsdale, Paradise Valley, and Sun Cities areas and in Valley resorts. Therefore, the overall economic injection from the annual influx of winter residents to the metropolitan Phoenix area surely exceeded $400 million.

– Stephen K. Happel
– Timothy D. Hogan

Dr. Happel is Associate Professor of Economics and Dr. Hogan is Professor of Economics and Director of the Center for Business Research in the ASU College of Business.

The authors gratefully acknowledge funding from the Salt River Project and Western Savings and the cooperation of the park owners/managers who responded to the survey.

Reader Survey

To better serve the public, the Center for Business Research recently asked a sample of its subscribers to participate in a survey concerning *Arizona Business*. Based upon the responses, some changes are being incorporated into the publication. Two new business indicators, the monthly coincident economic indexes and the quarterly new business index, debuted in the April issue. The discussion of the quarterly economic forecasts will be expanded, beginning in the July issue. Given the Center's budget constraints, existing space must be reallocated – based on the survey responses – for these new or expanded topics.

The cooperation of those readers who took time to provide us with their opinions and insights is gratefully acknowledged.

Migration Still from North and East to South and West

State-to-state migration surged in 1985-86 according to the latest data available from the Internal Revenue Service. Arizona's 16 percent gain in the number of people moving to the state matched the national average, but its 4 percent rise in out-migration was among the smallest in the nation. The result was an acceleration in net in-migration second only to that in Florida.

This article provides an annual update to the geographical migration information presented in the December 1986 *Arizona Business*. The update for 1984-85 was included in the August 1987 issue.

NATIONAL MIGRATION PATTERNS

The sharp increase in mobility during 1985-86 followed a slight decline during 1984-85. Given that both years were in the midst of an economic expansion, this pattern is difficult to explain.

By Region

All regions experienced higher migration during 1985-86. Though in-migration rose substantially in some states, only two areas received more in-migration than in the prior year: the Southeast and the southern tier of states in the West. In general, the Midwest and Northeast continued to suffer net out-migration to the South and West.

Much has been written about the Northeast's economic recovery during the 1980s. Job creation multiplied while unemployment rates tumbled to the lowest levels in the nation. The low unemployment rates, however, partially reflect the undesirability of the area. Net out-migration from the Northeast was higher in 1985-86 than at any other time during the 1980s. In-migration jumped 28 percent, but out-migration soared 31 percent.

Net out-migration from the Midwest worsened significantly in 1985-86. Nearly all of the western Great Lakes and northern Great Plains states suffered their greatest net out-migration of the 1980s during this period. As in the Northeast, much of the improvement in the three prior years resulted from a recession-induced reduction in national mobility. People had difficulty leaving the Northeast and Midwest because jobs were not plentiful in the South and West. When those job opportunities resumed, so did the migration flows, even though economic conditions in the Midwest and Northeast had improved.

Though in-migration to the South rose just 12 percent, out-migration increased only 9 percent in 1985-86. Nearly every state in the region received greater net migration than in the previous year. Both the South Atlantic and East South Central areas enjoyed record net in-migration. Rather than moving to the West South Central states, where economies were mired in energy problems, it appears that people instead chose other southern states. Net in-migration to Texas, Louisiana, Oklahoma, and Arkansas fell from levels nearly double those of the South Atlantic area in 1981-82 to practically nil in 1984-85 and 1985-86, while net inflows to the South Atlantic area more than doubled.

In the West, in- and out-migration climbed less than 10 percent in 1985-86. Net inflows increased to the highest level of the 1980s. However, only the states in the southern part of the region – California, Arizona, Nevada, and New Mexico – enjoyed appreciable levels of net in-migration.

By State

Both in- and out-migration during 1985-86 were at the highest levels of the 1980s in most states. Compared to the prior year, no state experienced a decline in out-migration; in-migration decreased only to Montana, Idaho, Hawaii, and Louisiana.

In the East, a sharp worsening in net out-migration during 1985-86 gave Massachusetts and New York their weakest performances of the 1980s. In contrast, the small states of Maine, Vermont, Rhode Island, and New Hampshire all recorded their highest net in-migration of the 1980s. In the four years following the 1981-82 recession, New Hampshire ranked in the top 10 both in net migration and migration efficiency – the ratio of in- to out-migration (see Table 1).

Five southeastern states were among the top 10 in net migration, both for 1985-86 and the four years shown in Table 1. Florida's figure was 2.5 times as large as second-ranked California's in 1985-86. Texas kept its fifth-placed ranking during this period, even though the worst of its oil problems were just beginning in 1985-86. For the third straight year, its inflows remained less than one-third the level of previous years. Resource-related slumps continued to plague most of the northwestern and Rocky Mountain states.

ARIZONA MIGRATION

In-Migration

Acceleration in Arizona's in-migration during 1985-86 was not as great as in many states. The number of people moving to Arizona ranked 11th, the lowest of the 1980s. The greatest number of migrants came from California, more than double the number from sec-

TABLE 1
STATE RANKINGS
Four-year Cumulation, 1982-83 through 1985-86

Top Ten		Bottom Ten	
Net Migration	*Efficiency*	*Net Migration*	*Efficiency*
1. Florida	Florida	51. New York	Iowa
2. California	Arizona	50. Illinois	Illinois
3. Texas	Georgia	49. Ohio	New York
4. Arizona	New Hampshire	48. Michigan	Ohio
5. Georgia	North Carolina	47. Pennsylvania	Michigan
6. North Carolina	California	46. Iowa	Wisconsin
7. Virginia	Texas	45. Indiana	West Virginia
8. New Hampshire	Nevada	44. Wisconsin	North Dakota
9. South Carolina	Alaska	43. Massachusetts	Wyoming
10. Colorado	South Carolina	42. Louisiana	Pennsylvania

Source: Center for Business Research, College of Business, Arizona State University, from Internal Revenue Service Data.

ond-ranked Illinois. Other prime sources included New Mexico, Texas and Colorado. Proportionally, in-migration from the Midwest increased, while that from the South and West dipped, with the exception of New Mexico.

When the number of migrants from other states was compared to the resident populations of those states, New Mexico's migration rate to Arizona – which jumped in 1985-86 – was more than double that of any other state. Other western states also had relatively high rates; the lowest rates continued to be primarily from southeastern states.

Out-migration

The number of people leaving Arizona does not vary much from year-to-year; it continued to rank 20th in 1985-86. Proportionately, out-migration rose to the states bordering the Great Lakes. Both the proportion and number of Arizonans moving to New Mexico, Texas and California decreased. The greatest number, however, still went to California and New Mexico. Like in-migration, when adjusted for population, the highest rates of out-migration are with western states, the lowest with southeastern (and Mid-Atlantic) states.

Net Migration

Net migration to Arizona ranked third, up a notch from 1984-85. On a proportional basis, little geographic change occurred. Net in-migration was up with California and New Mexico and down with some of the midwestern states.

The net inflow was greatest from Illinois, more than double that of second-ranked Iowa. Other major suppliers included Michigan, Colorado, California, Ohio, Wisconsin, and Minnesota. Slight net out-migration was measured to Georgia, Alabama, South Carolina, Tennessee, and Nevada. The net rate adjusted for population was highest with Wyoming, New Mexico, Montana, North Dakota, and Utah.

Efficiency

Arizona's efficiency, the ratio of into out-migration, remained second to that of Florida in 1985-86, even though Arizona's figure rose from 152 to 169, the highest of the 1980s. Efficiencies declined with 17 states, but soared with Montana, Wyoming, Nebraska, and North Dakota. The highest efficiency was with Iowa at 557 (11 people moving from Iowa to Arizona for every two who moved in the opposite direction). Other efficient flows included Nebraska (412), Wyoming (392), North Dakota (380), Wisconsin (369), and Illinois (366). The lowest ratio was 90, with Tennessee.

COMPARISON TO COMPETITORS

With slumps continuing into 1988 in Texas, Colorado and other states with resource-dependent economies, California remains Arizona's main "competitor" for migrants. California's net in-migration exceeded Arizona's by approximately 20 percent in 1985-86, not as much as in 1984-85. With high levels of both in- and out-migration, California's efficiency (124) is much lower than that of Arizona.

Nevada and New Mexico also attract migrants similar to those moving to Arizona, but their flows are relatively small. The Southeast has benefited from the bulk of the interstate population movement in recent years, but the geographic sources of new residents largely differ from those of Arizona, so that southeastern states cannot be considered as competitors.

In the near-term, however, the performance of other states will have little impact on Arizona's attraction of migrants. The current reduced flows result from the sluggish local economy, which largely is a consequence of the over-extended construction boom from 1983 through 1986. Changing conditions in competing states as well as in northern and eastern states are secondary to Arizona's own economic health in the movement of people to the state.

– Tom R. Rex
Research Manager

Population Growth Subpar Again in First Quarter

Net in-migration to the Phoenix metropolitan area remained well below average during first quarter 1988. At 7,000 persons, the net inflow was comparable to that of the second and third quarters of 1987, up from only 4,000 during the fourth quarter.

Adding net natural increase – births less deaths – yields a total population change during first quarter 1988 of approximately 13,000. The Valley's population surpassed two million during this quarter, reaching 2,006,000 at the end of March.

For the year ending in March, net in-migration totaled only 25,000, barely more than one-half the long-term average. Since 1970, such slow growth previously occurred only during the 1975 and 1982 recessions.

The fourth quarter figure probably will be the lowest until the next recession. However, little improvement should be expected through the rest of 1988. Net inflows likely will remain 7,000 to 8,000 per quarter.

Most migrants are relatively young working people; jobs must be created locally to enable them to move to the Phoenix area. After falling substantially during 1986, the rate of job creation has held relatively steady since first quarter 1987, and is forecast to remain so through 1988. Thus, a relatively stable rate of net in-migration also is likely.

After 1988, the Valley's growth largely will be dependent on national economic conditions. Should a national recession develop, the local economy will slow and net in-migration will fall further. If the national economy remains strong, the area's growth will hinge on the success of the local economy. High vacancy rates in commercial buildings will preclude much recovery in the construction industry. The economic stimulus will have to come from another, yet-to-be-identified source.

The Phoenix area's economy and population have grown relatively slowly for more than one year. These growth rates could remain less than the long-term averages into the early 1990s.

– Tom R. Rex
Research Manager

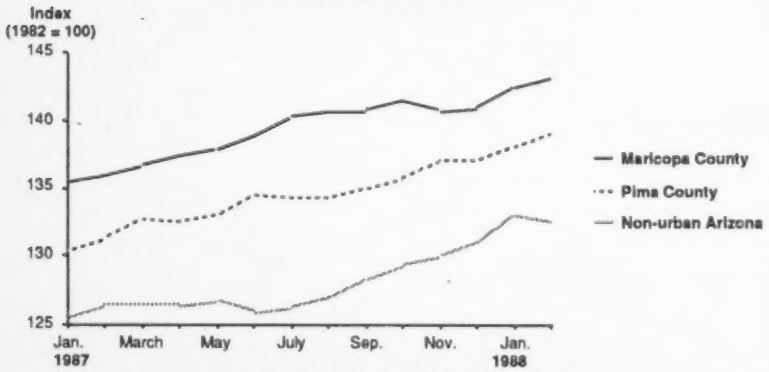
Economic Growth Remains Near Average

Economic growth, as measured by the coincident economic indexes, varied across Arizona in February. During the three months ending in February, however, growth rates throughout the state were nearly equivalent and somewhat greater than the long-term average.

Non-urban Arizona's economy was the strongest in the state from December through February, with the coincident index rising 1.8 percent. Gains in the metropolitan areas were nearly as great: 1.7 percent in Maricopa County and 1.5 percent in Pima County. This was the first time since early 1985 – when no growth briefly prevailed – that gains were relatively equal across the state.

The coincident index for the Tucson area rose 0.8 percent in February to a record 139.1 (1982 = 100). In the Phoenix area, an average 0.5-percent gain pushed the index to a high of 143.1 (see Figure I).

FIGURE I
COINCIDENT ECONOMIC INDEXES



Source: Center for Business Research, College of Business, Arizona State University

Following a large 1.5-percent advance in January, the coincident index for non-urban Arizona fell 0.4 percent to 132.5.

Retail sales increased across the state in February. The value of commercial building permits rose – though only minimally in Maricopa County – from January's depressed levels. Commercial construction in the metropolitan areas remained much lower than during most of 1987.

Employment rose marginally and the unemployment rate decreased slightly in the metropolitan areas in February. In rural Arizona, however, January's large advance in each measure was partially negated, accounting for the decline in its coincident index.

In the 12 months ending in February, growth rates ranged from a slightly subpar 4.8 percent in rural Arizona to a minimally greater-than-average 5.9 percent in the Tucson area.

The composite statewide measure rose 0.4 percent in February, reaching a high of 140.4.

– Tom R. Rex
Research Manager

April Purchasing Indicators Show Expanding Economy

The indicators from the monthly survey of purchasing managers continued to expand sharply in April, with new orders received, production, and employment moving to higher levels. Prices also rose, at a rate exceeded during the past seven years only in January 1988, indicating that inflationary pressures at the commodity level have intensified during the past several months.

As higher new order and production levels put pressure on vendor operating rates, lead times will continue to extend. In conjunction with further increases in purchase levels, the price trend will tilt up even further. The growth in inventory was modest through 1987 and still is so far this year. Higher production levels and lengthening lead times have made it difficult to build stocks. An inventory imbalance which might result in a reversal of the growth trend is not evident.

TABLE 1
APRIL PURCHASING SURVEY

	Percent of Purchasing Managers Indicating Each Response (April compared to March)		
Key Indicators	*Higher*	*Same*	*Lower*
Prices paid for major commodities	55	41	4
Delivery time from vendors	36	54	10
Purchased materials inventory level	33	44	23
New orders received	43	36	21
Production	40	43	17
Employment	25	63	12
Purchases	42	37	21

Source: Purchasing Management Association of Arizona and the Purchasing Management Association of Southern Arizona

The strong rate of activity enjoyed so far this year continues to accelerate. Further advances should occur as we move into the summer months. It is likely that inflation will intensify, as the capacity crunch worsens. Interest rates should begin to move up, restricting the high consumer and capital spending levels fueling the economic growth.

– Harold Fearon

Dr. Fearon is the National Association of Purchasing Management Professor in the ASU College of Business.

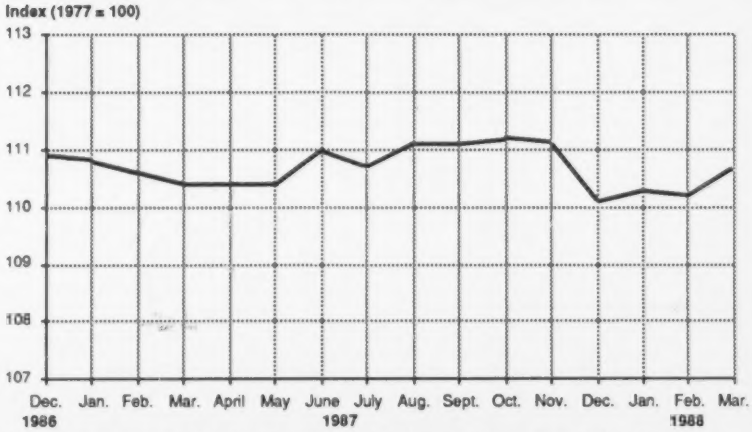
Arizona Leading Index Rises in March

The Arizona Index of Leading Economic Indicators increased in March to 110.7 (see Figure I). The index staged a comeback from February's 110.2 level, but was still barely above the 110.4 of March 1987.

The Arizona leading index is based on ten economic indicators, combined and weighted to project the pace of economic activity several months ahead. Five of the components are drawn from a monthly survey of Arizona purchasing managers conducted by Dr. Harold Fearon.

The biggest boost to the index came from five components that had exerted a negative influence on February's index value. Residential building permits, employment, production, unemployment claims and sensitive prices turned positive in March. The average work week, new orders and money supply continued to have a positive impact. Only two of the ten components, inventories and delivery times, were negative in March.

FIGURE I
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



Source: Economic Outlook Center, College of Business, Arizona State University

OUTLOOK

The index suggests that the slow to moderate economic growth recorded in 1987 will continue into the second half of 1988. The relatively flat performance of the index over the past few months offers no hint of a strengthening of the economy in the months ahead. However, the absence of a series of sharp declines means a recessionary downturn is unlikely.

The sector with the worst prospects continues to be the construction industry. Although residential building permits was the largest positive contributor to the increase in the March index, closer examination indicates that this figure is influenced by a few large projects coming on line rather than a general increase in activity. The pattern of reduced construction activity punctuated with a few large projects will continue while the industry struggles through the current period of high vacancy rates and slower population growth in the state. Population growth in Arizona has slowed because of the state's sluggish economic growth, particularly the slackened rate of job creation. In addition, improved economic conditions both in the states that supply Arizona with people and in other Sunbelt states has contributed to the state's reduced population growth.

TABLE 1
NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS

	Net Contribution*			
	Dec.	*Jan.*	*Feb.*	*Mar.*
Delivery Time*	–.09	.09	.03	–.09
Inventory Levels*	–.08	.04	.06	–.02
New Orders*	–.11	–.05	.02	.01
Production*	–.02	.02	–.08	.06
Employment*	.01	–.02	–.09	.01
Residential Building Permits	–.37	–.12	–.10	.31
Unemployment Insurance Claims	–.04	.13	–.23	.05
Average Workweek, Manufacturing	–.09	–.02	.05	.05
Money Supply	.00	.23	.26	.12
Change in Sensitive Materials Prices	–.09	–.10	–.06	.01
OVERALL INDEX CHANGE (%)	–.89	.21	–.15	.50

*The net contribution of each component is calculated by multiplying the monthly percent change in its index by its relative importance.

*Based on indicators from the purchasing management associations of Arizona and southern Arizona.

Source: Economic Outlook Center, College of Business, Arizona State University

The money supply was the second most influential component affecting the index this month. Whether the money supply continues to rise in the months ahead hinges on the Federal Reserve's perception of the danger of inflation and the fact that 1988 is an election year. Historically, the Fed has been reluctant to slow the growth of the money supply during an election year unless inflation signals are particularly strong.

The most evident characteristic of the course of the leading index over the last 18 months has been the lack of variability or any clear direction. The index has moved within a narrow range marked by a high point of 111.2 (October of 1987) and a low point of 110.1 (December of 1987 and October of 1986). This pattern in the index is consistent with the performance of the Arizona economy in 1987. The economy grew at a slow-to-moderate pace with some sectors doing well and others doing poorly. It seems likely that the rest of 1988 will be much the same.

– **Tracy L. Clark,** *Economist*
Economic Outlook Center

ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Value	Percent Change from Previous Period	Percent Change from Year Ago	Year-to-Date Value	Year-to-Date Percent Change from Year Ago
GROSS STATE PRODUCT (In Billions of Dollars, at Annual Rate)						
Arizona - Current Dollars	3rd Qtr.	57.463	1.8	9.5	NA	NA
Arizona - 1982 Dollars	3rd Qtr.	48.334	0.9	5.4	NA	NA
COINCIDENT ECONOMIC INDEXES (1982 = 100)						
Arizona	Feb.	140.4	0.4	5.2	NA	NA
Metropolitan Phoenix	Feb.	143.1	0.5	5.3	NA	NA
Metropolitan Tucson	Feb.	139.1	0.8	5.9	NA	NA
Non-urban Arizona	Feb.	132.5	-0.4	4.8	NA	NA
CONSUMER PRICE INDEX (1982-84 = 100)						
Metropolitan Phoenix	1st Qtr.	117.4	0.7	3.1	NA	NA
INDEX OF LEADING ECONOMIC INDICATORS (1977 = 100)						
Arizona	March	110.7	0.5	0.3	NA	NA
BUILDING PERMITS (Total Dollar Value in Thousands)						
Maricopa County	March	298,048	37	–8	696,372	–22
Pima County	March	69,196	68	–9	136,627	–15
Balance of State	March	66,844	43	39	144,588	9
Arizona	March	434,088	42	–3	977,587	–17
TOTAL HOUSING UNITS AUTHORIZED						
Maricopa County	March	2,296	90	–8	4,704	–38
Pima County	March	1,138	124	20	1,880	–13
Balance of State	March	830	15	3	2,350	–3
Arizona	March	4,264	75	0	8,934	–26
HOME SALES						
Maricopa County - Number	April	4,450	37	14	14,860	–23
Maricopa County - Median Price	April	79,000	0	1.1	79,700	1.4
HOUSING AFFORDABILITY INDEXES						
Metropolitan Phoenix - New Homes	4th Qtr.	87	–5.4	–12.1	NA	NA
Metropolitan Phoenix - Resale Homes	4th Qtr.	106	–2.8	–7.8	NA	NA
MORTGAGE INTEREST RATES (Conventional, 30-year, Fixed-rate)						
Maricopa County	April	10.2	3.0	2.0	NA	NA
POPULATION ESTIMATES (In Thousands)						
Maricopa County	1st Qtr.	2,006	0.7	2.4	NA	NA
Arizona	1st Qtr.	3,463	0.6	2.2	NA	NA
ELECTRICAL POWER SALES (In Millions of Kilowatt Hours)						
Arizona	March	3,110	7.3	2.6	9,341	6.4

NA = Not Applicable

Source: Center for Business Research, College of Business, Arizona State University

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